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SYSTEM:OS - DIALOG OneSearch

File 351:DERWENT WPI 1963-1997/UD=9718;UA=9715;UM=9710

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File 347:JAPIO OCT 1976-1996/DEC.(UPDATED 970505)

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*File 347: Records current through Kokai Number 08-340700

File 344:Chinese Patents ABS Apr 1985-1997/May

(c) 1997 European Patent Office

Set Items Description

?exs td761

HILIGHT set on as '*'

441 DHA

677 DOCOSAHEXAENOIC

810786 ACID

649 DOCOSAHEXAENOIC(W)ACID

S1 858 DHA OR DOCOSAHEXAENOIC()ACID

?exs td762

HILIGHT set on as '*'

S2 35320 CONJUGATE?

?s s1 and s2

858 S1

35320 S2

S3 5 S1 AND S2

?t 3/9/all

3/9/1 (Item 1 from file: 351)

DIALOG(R)File 351:DERWENT WPI

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011043748

WPI Accession No: 97-021672

Related WPI Accession No: 96-506074; 96-506079; 96-506082; 97-021670;
97-021671

XRAM Accession No: C97-007027

gem-Diol ester(s) of polyunsaturated fatty acids e.g. gamma linolenic
acid - for pharmaceutical, food and cosmetic use;

Patent Assignee: SCOTIA HOLDINGS PLC (SCOT-N)

Inventor: HORROBIN D F; KNOWLES P; MANKU M; MCMORDIE A; PITT A; REDDEN P

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Main IPC	Week
ZA 9603433	A	19961030	ZA 963433	A	19960430	A23L-000/00	199702 B

Priority Applications (No Kind Date): GB 958823 A 19950501

Patent Details:

Patent Kind Lan Pg Filing Notes Application Patent
ZA 9603433 E 41

Abstract (Basic): ZA 9603433 A

gem-Diol esters of formula R1O-CHR3-OR2 (I) are new. R1 = acyl gp. derived from a 16-30C fatty acid contg. two or more cis or trans double bonds, partic. an n-6 or n-3 series essential fatty acid or *conjugated* linoleic acid (cLA) or columbinic acid (CA) or parinaric acid; R2 = R1 or any other nutrient, drug or bioactive residue; R3 = H or hydrocarbonyl opt. contg. heteroatoms, pref. alkyl, partic. 1-4C alkyl.

USE - (I) where R1 = acyl derived from gamma linolenic acid (GLA) or dihomo gamma linolenic acid (DGLA) and R2 = acyl derived from GLA, DGLA, stearidonic acid (SA), eicosapentaenoic acid (EPA), *docosahexaenoic* acid* (*DHA*), cLA or CA are useful as food components, nutritional supplements, food additives, components of clinical nutrition prods. for enteral or parenteral admin. and cosmetic components, esp. for treating (a) complications of diabetes, esp. neuropathy and retinopathy; and improvement of responses to insulin in diabetes and pre-diabetes; (b) cancers; (c) osteoarthritis; (d) rheumatoid arthritis; (e) other inflammatory and auto-immune diseases e.g. Sjogren's syndrome, systemic lupus, ulcerative colitis, Crohn's disease and uveitis; (f) respiratory diseases e.g. asthma; (g) neurological disorders e.g. multiple sclerosis, Parkinson's disease and Huntington's chorea; (h) renal and urinary tract disorders; (i) cardiovascular disorders; (j) degenerative diseases of the eye e.g. retinitis pigmentosa and senile macular degeneration; (k) psychiatric disorders including schizophrenia, Alzheimer's disease, attention deficit disorder, alcoholism and depression; (l) prostatic hypertrophy and prostatitis; (m) impotence and male infertility; (n) mastalgia; (o) male pattern baldness; (p) osteoporosis; (q) dermatological and allergic disorders; (r) dyslexia and other learning disabilities; and (s) cancer cachexia. (I) where R1 = acyl derived from GLA, DGLA, arachidonic acid (AA), SA, cLA, EPA or *DHA* and R2 = one of the following agents are useful for treating any disease esp. the following disorders, and other uses mentioned: (a) tryptophan for psychiatric, neurological, behavioural, pain and other disorders and esp. depression, sleep and migraine; (b) phenylalanine for depression, multiple sclerosis and chronic fatigue syndrome; (c) arginine for diseases in which the production of nitric oxide is defective; (d) carnitine or carnitine derivs. for muscle weakness, cardiac failure, chronic fatigue syndrome, Alzheimer's disease, and peripheral neuropathies; (e) any other amino acid or related substance or aminolevulinic acid or deriv. thereof for cancers; (f) adenylosuccinate or related substances for muscular dystrophy, cardiac failure, chronic fatigue and Alzheimer's disease and other dementias; (g) aspirin, salicylic acid, indomethacin, ibuprofen, or any other non-steroidal anti-inflammatory drug for inflammatory disorders or pain, of Alzheimer's disease and other dementias and of any disease in which platelet aggregation should be inhibited; (h) any antibiotic for the treatment of any appropriate infectious disease but esp. tetracycline, clindamycin, minocycline, chlortetracycline and erythromycin for the treatment of acne; (i) any antimalarial or anti-protozoal drug esp. chloroquine, mepacrine,

quinacrine and mefloquine for the treatment of malaria, protozoal disorders, inflammatory disorders and schizophrenia; (j) any antifungal drug esp. metronidazole and antifungal imidazoles and nitroimidazoles and amphotericin for the treatment of fungal infections of various types; (k) any anti-inflammatory steroid esp. hydrocortisone and betamethasone for the treatment of skin disorders and beclomethasone and budesonide for the treatment of asthma; (l) any gonadal steroid esp. oestrogens and progestogens for the treatment of ovarian deficiency and osteoporosis and androgens for the treatment of testicular deficiency; (m) any adrenal steroid esp. dehydroepiandrosterone for the treatment of disorders associated with ageing; (n) any retinoid esp. tretinoin and isotretinoin for the treatment of dermatological disorders and for use in skin care; (o) any anticancer agent for the treatment of cancer; (p) any antipsychotic agent for the treatment of schizophrenia and other psychoses; (q) any antidepressive agent for the treatment of depression; (r) any anti-anxiety agent esp. for the treatment of anxiety and panic attacks; (s) any immunosuppressive agent esp. cyclosporine and tacrolimus for the control of immunity after organ transplantation and for the treatment of autoimmune and inflammatory disorders including psoriasis, eczema, asthma, rheumatoid arthritis and inflammatory bowel disease; (t) any proton pump inhibitor or H2 antagonist esp. diseases associated with excess gastric acid production or reduced defences against gastric acidity; (u) any diuretic to treat fluid retention and hypertension; (v) any calcium antagonist or angiotensin converting enzyme inhibitor or beta blocker to treat cardiovascular disease; (w) antiepileptic drug esp. phenytoin, carbamazepine or lamotrigine to treat epilepsy; (x) any hypolipidaemic agent esp. fibrates and statins for cholesterol lowering; (y) any oral hypoglycaemic for diabetes management; (z) any bisphosphonates for management of osteoporosis or Paget's disease; (aa) any contrast agents for radiology; (bb) any peptide or protein for treatment using these diseases.

ADVANTAGE - Transport through lipid membranes, e.g. of cells, of the skin or the blood-brain barrier, is enhanced Dwg.0/0

ZA 9603433 A

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disease and Huntington's chorea; (h) renal and urinary tract disorders; (i) cardiovascular disorders; (j) degenerative diseases of the eye e.g. retinitis pigmentosa and senile macular degeneration; (k) psychiatric disorders including schizophrenia, Alzheimer's disease, attention deficit disorder, alcoholism and depression; (l) prostatic hypertrophy and prostatitis; (m) impotence and male infertility; (n) mastalgia; (o) male pattern baldness; (p) osteoporosis; (q) dermatological and allergic disorders; (r) dyslexia and other learning disabilities; and (s) cancer cachexia. (I) where R1 = acyl derived from GLA, DGLA, arachidonic acid (AA), SA, cLA, EPA or *DHA* and R2 = one of the following agents are useful for treating any disease esp. the following disorders, and other uses mentioned: (a) tryptophan for psychiatric, neurological, behavioural, pain and other disorders and esp. depression, sleep and migraine; (b) phenylalanine for depression, multiple sclerosis and chronic fatigue syndrome; (c) arginine for diseases in which the production of nitric oxide is defective; (d) carnitine or carnitine derivs. for muscle weakness, cardiac failure, chronic fatigue syndrome, Alzheimer's disease, and peripheral neuropathies; (e) any other amino acid or related substance or aminolevulinic acid or deriv. thereof for cancers; (f) adenylosuccinate or related substances for muscular dystrophy, cardiac failure, chronic fatigue and Alzheimer's disease and other dementias; (g) aspirin, salicylic acid, indomethacin, ibuprofen, or any other non-steroidal anti-inflammatory drug for inflammatory disorders or pain, of Alzheimer's disease and other dementias and of any disease in which platelet aggregation should be inhibited; (h) any antibiotic for the treatment of any appropriate infectious disease but esp. tetracycline, clindamycin, minocycline, chlortetracycline and erythromycin for the treatment of acne; (i) any antimalarial or anti-protozoal drug esp. chloroquine, mepacrine, quinacrine and mefloquine for the treatment of malaria, protozoal disorders, inflammatory disorders and schizophrenia; (j) any antifungal drug esp. metronidazole and antifungal imidazoles and nitroimidazoles and amphotericin for the treatment of fungal infections of various types; (k) any anti-inflammatory steroid esp. hydrocortisone and betamethasone for the treatment of skin disorders and beclomethasone and budesonide for the treatment of asthma; (l) any gonadal steroid esp. oestrogens and progestogens for the treatment of ovarian deficiency and osteoporosis and androgens for the treatment of testicular deficiency; (m) any adrenal steroid esp. dehydroepiandrosterone for the treatment of disorders associated with ageing; (n) any retinoid esp. tretinoin and isotretinoin for the treatment of dermatological disorders and for use in skin care; (o) any anticancer agent for the treatment of cancer; (p) any antipsychotic agent for the treatment of schizophrenia and other psychoses; (q) any antidepressive agent for the treatment of depression; (r) any anti-anxiety agent esp. for the treatment of anxiety and panic attacks; (s) any immunosuppressive agent esp. cyclosporine and tacrolimus for the control of immunity after organ transplantation and for the treatment of autoimmune and inflammatory disorders including psoriasis, eczema, asthma, rheumatoid arthritis and inflammatory bowel disease; (t) any proton pump inhibitor or H2 antagonist esp. diseases associated with excess gastric acid production or reduced defences against gastric acidity; (u) any diuretic to treat fluid retention and hypertension; (v) any calcium antagonist or angiotensin

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ADVANTAGE - Transport through lipid membranes, e.g. of cells, of the skin or the blood-brain barrier, is enhanced.

Dwg.0/0

Title Terms: GEM; DIOL; ESTER; POLYUNSATURATED; FATTY; ACID; GAMMA; LINOLENIC; ACID; PHARMACEUTICAL; FOOD; COSMETIC

Derwent Class: B04; B05; C03; D13; D21

International Patent Class (Main): A23L-000/00

International Patent Class (Additional): A61K-000/00; C07C-000/00

File Segment: CPI

Manual Codes (CPI/A-N): B10-G02; C10-G02; B14-C03; C14-C03; B14-C09A; C14-C09A; B14-C09B; C14-C09B; B14-E10C; C14-E10C; B14-E11; C14-E11; B14-G02D; C14-G02D; B14-H01; C14-H01; B14-J01A; C14-J01A; B14-K01A; C14-K01A; B14-N03; C14-N03; B14-N07A; C14-N07A; B14-S04; C14-S04; D03-H01T2; D08-B09A

Chemical Fragment Codes (M2):

01 D011 D013 D014 D022 D023 D601 D621 E111 E130 F011 F012 F013 F014
F015 F016 F017 F523 F580 G010 G011 G013 G014 G019 G020 G031 G035
G037 G038 G060 G100 G420 H100 H102 H103 H121 H141 H161 H181 H211
H401 H402 H441 H462 H481 H541 H602 H608 H641 H642 H7 H722 H723 J0
J011 J012 J2 J241 J251 J271 J272 J331 J522 J563 K0 K850 L250 L463 L6
L660 L722 L910 L922 L941 M113 M119 M150 M210 M211 M212 M214 M225
M226 M231 M232 M240 M262 M272 M273 M281 M282 M283 M311 M312 M313
M314 M315 M316 M321 M322 M331 M332 M333 M340 M342 M343 M349 M372
M373 M381 M383 M391 M392 M412 M413 M414 M416 M510 M511 M520 M521
M530 M531 M532 M540 M710 M903 M904 P220 P241 P310 P312 P411 P412
P420 P421 P423 P431 P433 P434 P441 P444 P446 P447 P448 P451 P511
P512 P517 P520 P522 P526 P623 P625 P633 P641 P714 P722 P723 P731
P732 P735 P738 P813 P814 P816 P822 P831 P850 P922 P930 P943 Q211
Q220 Q223 Q254 Q261 Q262 9702-42001-N 00211;

Ring Index Numbers: 00211

Generic Compound Numbers: 9702-42001-N

3/9/2 (Item 2 from file: 351)

DIALOG(R) File 351:DERWENT WPI

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009932483

WPI Accession No: 94-200194

XRAM Accession No: C94-091495

New fatty acyl-peptide *conjugates* for inhibiting cell proliferation - more active than free peptide; partic. for treating tumours, virus-infected cells, psoriasis, etc

Patent Assignee: BIOSIGNAL KUTATO FEJLESZTO KFT (BIOS-N); SYNTHETIC